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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,280	10/06/2000	David B. Dwyer	H0001181	8489

128 7590 07/27/2004

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EXAMINER
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TRAN, DALENA

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/680,280

**Applicant(s)**

DWYER ET AL.

**Examiner**

Dalena Tran

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### Notice to Applicant(s)

1. This office is responsive to the amendment filed on 3/31/04. Claims 1-51 are pending.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-5,8-9,11-15,28-32,35-36,38-42,45-46, and 48-51, are rejected under 35 U.S.C.102(e) as being anticipated by Deker et al. (6,181,987).

As per claims 1,11,28, and 51, Deker et al. disclose a navigation system, comprising: a display device that includes a graphical display portion and a textual display portion (see column 4, lines 36-42), and logic for operating the graphical display portion and the textual display portion of display device, logic presenting a textual display of an original flight plan and a modified flight plan in the textual display portion while simultaneously presenting a graphical display of the original flight plan in the graphical display portion (see column 4, lines 36-64; column 5, lines 14-38; column 7, lines 19-38; and column 8, lines 7-19).

As per claims 39-40, Deker et al. disclose a display device (see column 5, lines 5-23), logic for operating a graphical display portion and the textual display portion of display device, logic presenting a textual display of comparative data for an original flight plan and a modified flight plan in the textual display portion while simultaneously presenting a graphical display of

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the original flight plan in the graphical display portion (see column 4, lines 36-63; columns 6-7, lines 66-15; and column 8, lines 7-19).

As per claims 2,12, and 29, Deker et al. disclose the textual display presented by logic comprises a textlist of waypoints that are on the original flight plan and a modified flight plan, and performance data for common waypoints that are both the original flight plan and a modified flight plan (see column 4, lines 43-48; and column 8, lines 13-19).

As per claims 3-4,13-14,30-31, and 41, Deker et al. disclose the textual display presented by logic further comprises performance data for waypoints that are added to the modified flight plan (see column 7, lines 50-53), and the performance data for each common waypoint comprises performance data for the waypoint on the original flight plan and for the waypoint on the modified flight plan (see column 7, lines 5-15).

As per claims 5,15,32, and 42, Deker et al. disclose an interface device that allows an operator to change the modified flight plan (see column 7, lines 39-53), and logic updates the performance data on the textual display for common waypoints when the modified flight plan is changed (see column 7, lines 54-67).

As per claims 8,35, and 45, Deker et al. disclose a graphical display of the original flight plan and the modified flight plan is simultaneously presented on display device together with the simultaneously textual display of the original flight plan and the modified flight plan (see column 8, lines 7-19).

As per claims 9,36, and 46, Deker et al. disclose interface device allows an operator to change the modified flight plan on either the textual display or the graphical display (see column 1, lines 37-64), and the graphical display of the modified flight plan is updated when the

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modified flight plan is changed (see column 7, lines 39-67), a graphical display of the original flight plan and the modified flight plan is simultaneously presented on display device together with the simultaneously textual display of the original flight plan and the modified flight plan (see column 8, lines 7-19).

As per claim 38, Deker et al. disclose a navigation system, comprising: a CPU, and a flight control system that controls an airplane based on inputs from CPU (see the abstract; and column 3, lines 5-29), a display device (see column 2, lines 22-29), logic for operating a graphical display portion and the textual display portion of display device, logic presenting a textual display of an original flight plan and a modified flight plan in the textual display portion while simultaneously presenting a graphical display of the original flight plan in the graphical display portion (see column 4, lines 36-63; column 7, lines 34-38; and column 8, lines 7-19), wherein CPU provides inputs to flight control system based on navigational data corresponding to the original flight plan that is presented on display device (see column 2, lines 1-21; and lines 30-60).

As per claim 48, Deker et al. disclose a textual display presented by logic comprises a textlist of waypoints that are on the original flight plan and a modified flight plan, and performance data for common waypoints that are both the original flight plan and a modified flight plan (see column 4, lines 43-48; and column 8, lines 13-19).

As per claim 49, Deker et al. disclose logic produces a textlist by merging the original flight plan and the modified flight plan, with the textlist displaying waypoints that have been added in the modified flight plan and waypoints that are removed from the original flight plan, and the textlist being displayed on the textual display portion of display device (see column 4,

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lines 43-48; column 5, lines 28-40; column 6, lines 17-25; column 7, lines 50-53; and column 8, lines 13-19).

As per claims 50, Deker et al. disclose the modified flight plan is a pilot-created flight plan achieved by changing waypoints on the original flight plan (see column 6, lines 14-16, and lines 25-32).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6-7,10,16-17,33-34,37,43-44, and 47, are rejected under 35 U.S.C.103(a) as being unpatentable over Deker et al. (6,181,987) in view of Lions (4,086,632).

As per claims 6,16,33, and 43, Deker et al. do not disclose logic designates on the textual display waypoints to be removed. However, Lions discloses logic designates on the textual display waypoints to be removed, which correspond to waypoints that are on the original flight plan but not on the modified flight plan (see columns 7-8, lines 36-51; and columns 10-11, lines 62-37). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Deker et al. by combining logic designates on the textual display waypoints to be removed, which correspond to waypoints that are on the original flight plan but not on the modified flight plan for updating the new flight plan, and provide a clear view of the flight plan for the operator.

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As per claims 7,17,34, and 44, Deker et al. do not disclose modified flight plan is activated to become a new original flight plan. However, Lions discloses modified flight plan is activated to become a new original flight plan, logic removes from the textual display the waypoints that are designated to be removed (see the abstract; and columns 11-12, lines 38-26). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Deker et al. by combining modified flight plan is activated to become a new original flight plan, logic removes from the textual display the waypoints that are designated to be removed for avoiding confusion to the operator and recognize a new flight path.

As per claims 10,37, and 47, Deker et al. disclose interface device allows an operator to change the modified flight plan on either the textual display or the graphical display (see column 1, lines 37-64), and the graphical display of the modified flight plan is updated when the modified flight plan is changed (see column 7, lines 39-67), a graphical display of the original flight plan and the modified flight plan is simultaneously presented on display device together with the simultaneously textual display of the original flight plan and the modified flight plan (see column 8, lines 7-19). Deker et al. do not disclose when the modified flight plan is activated to become the new flight plan, the graphical display is updated to display only the new original flight plan. However, Lions discloses when the modified flight plan is activated to become the new flight plan, the graphical display is updated to display only the new original flight plan (see columns 9-10, lines 20-38). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Deker et al. by combining when the modified flight plan is activated to become the new flight plan, the graphical display is updated to display

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only the new original flight plan to avoid unnecessary waypoints left in the screen display to confuse the pilot.

6. Claim 18 is method claim corresponding to system claims 1 and 11 above. Therefore, it is rejected for the same rationales set forth as above.

Claim 19 is method claim corresponding to system claims 2 and 12 above.

Claim 20 is method claim corresponding to system claims 3 and 13 above.

Claim 21 is method claim corresponding to system claims 4 and 14 above.

Claim 22 is method claim corresponding to system claims 5 and 15 above.

Claim 23 is method claim corresponding to system claims 6 and 16 above.

Claim 24 is method claim corresponding to system claims 7 and 17 above.

Claims 25-27 are method claims corresponding to system claims 8-10 above. Therefore, they are rejected for the same rationales set forth as above.

#### **Remarks**

7. Applicant's argument filed on 3/31/04 have been fully considered but they are not deemed to be persuasive.

Applicant's argue on page 2-3 of the amendment that Deker does not disclose presenting a textual display of an original flight plan and a modified flight plan while simultaneously presenting a graphical display of the original flight plan. However, in reviewing Deker reference, in column 4, lines 36-64, Deker disclose in the screen 21 of figure 2, the textual window 28 provides a number of parameters on the flight plan followed by the aerodyne, as well as the diversion flight plan (column 4, lines 43-45), it is obvious that the parameters relate to the



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flight plan themselves. Also, the graphic window 27 simultaneously presenting a graphical display of the original flight plan in the graphical display portion (column 4, lines 53-63).

Also, in column 5, lines 14-38, still in display screen 21 of figure 2, this screen presenting the textual display of an original flight plan and a modified flight plan while simultaneously presenting a graphical display of the original flight plan, the Way Point of the flight plan (column 5, line 21), and flight plan solution comprises segments of air routes (lines 29-30) are all the flight plan themselves.

In column 7, lines 19-38, the screen 22 display of the textual window and the graphical window at the same time; the computer display of the flight plans that it has determined along with explanations in the textual window 28 on the first flight plan solution selected. The flight plan solutions meet the prevailing criteria of selection and optimization (column 7, lines 25-30); lines 34-38, the graphic window 27 shows the first diversion flight plan 32 in the list of the flight plan solutions while the textual part 28 gives the significant parameters enabling the active flight plan to be compared with the diversion flight plan. All these are the list of parameters under the flight plan themselves.

Also, in column 8, lines 7-19, window 27 of figure 4 display of the textual window and the graphical window at the same time; lines 13-19; the textual window 28 gives the type, the point and angle of exit from the active flight plan, ....., the point of return to the active flight plan, the parameters of prediction of the active flight plan and of the avoidance flight plan as well as the modifiable parameters of the new flight plan. All the parameters in the textual window represent the flight plan themselves.

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8. Examiner maintains that all the references cited meet the language of the claims invention. Therefore, the rejection under 35 U.S.C.103(a) are considered to be proper.

**THIS ACTION IS MADE FINAL.** See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136 (a).

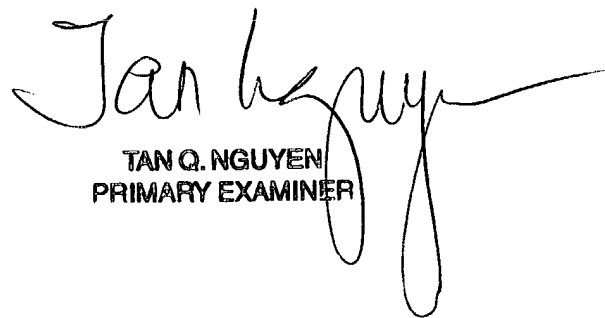
A shorten statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE MONTHS shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136 (a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 703-308-8223. The examiner can normally be reached on M-F (7:30 AM-5:30 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
TAN Q. NGUYEN  
PRIMARY EXAMINER

/dt  
July 21, 2004